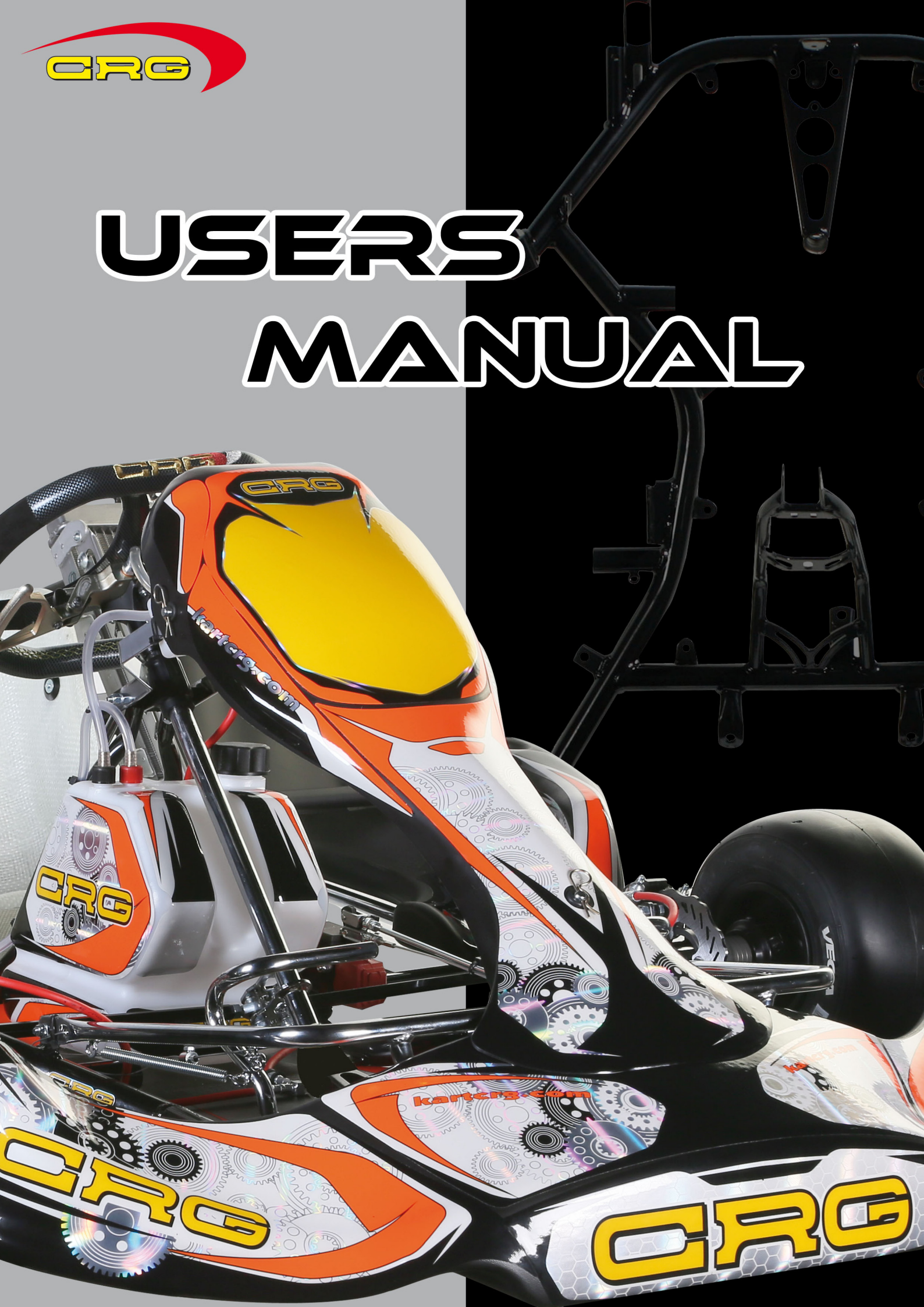
USERS MANUAL



Winning products

CRG
www.kartcrg.com

1. Introduction to the company ..... PAG. 4

2. Past, present and the future ..... PAG. 5

3. Welcome to CRG ..... PAG. 6

4. How your CRG arrives ..... PAG. 7

5. Getting your CRG out the box ..... PAG. 8

6. Seat measurements ..... PAG. 9

7. Mounting the bodywork ..... PAG. 10 -14

7.1 Mounting the side fairing ..... PAG. 10

7.2 Mounting the front bumpers ..... PAG. 11

7.3 Mounting the front spoiler ..... PAG. 12

7.4 Mounting the front fairing ..... PAG. 13

7.5 Mounting the rear bumper ..... PAG. 14

8. General set-up ..... PAG. 15

9. Front end adjustments ..... PAG. 16

10. Rear axle hardness ..... PAG. 17

11. Bleeding the CRG brake system ..... PAG. 18

12. Changing the brake pads ..... PAG. 19

13. Safety instructions ..... PAG. 20 - 21

1. Introduction to the company

CRG, is a world leading company in the production and marketing of chassis and spare parts for karts; it was founded in 1986 building up on the experience of its promoting partners in the company Kalì-Kart dating back to the 70s.The latter started up as a small chassis manufacturing company providing products for racing enthusiasts but within a few years it became a nationally recognized reality obtaining its first Italian title in class 125cc in 1979 which was later on followed by several international wins too.The newly born CRG established itself within the world's karting panorama thanks to a constant commitment to research and technical development of its products and in the 90s its structure was converted from craft-made production into industrial manufacturing.

The expansion of the capillary network of importers and distributors in all five continents started in the same period with a keen eye on important markets like Europe and United States. Currently there are about 100 official resellers in the world including some in emergent countries like East-Europe and Arabian Countries.In mid 90s CRG started the development of a new line specifically dedicated to the study and design of kart engines. This new activity required an high level of specialization both in terms of production structure and person qualification which motivated the foundation of a separate company, named Maxter S.r.l, following the company and production restructuring that took place in year 2000.

In 2003 the company structuring was completed by the creation of Tinini Group, the head holding controlling and coordinating Maxter S.r.l. and newco CRG S.p.A., that has been focused on its core business since then. Both units have been relocated since the end of 2009 to a new industrial hub that represents even better the leadership role of the company in its sector. Aside of the technological evolution of karts and their components, the company focused its commitment to international racing: the Racing Team showcase feature s a very high number of World titles, European and Continental championships as well as countless international wins in the most prestigious races. A team of high-level professional mechanics supports works drivers during the racing weekends providing them with precious technical support while testing the newly devised products of the company through study, research and severe field testing on the most prestigious circuits.

2. Past, present and the future

CRG has been and still is a real champions breeding ground: this is witnessed by the high number of drivers that,thanks to their special skills went all the way up to Formula 1. Some names that have been racing with CRG colors are: Michaël Schumacher, Alessandro Zanardi, Ralf Schumacher, Giancarlo Fisichella, Nick Heidfeld, Jan Magnussen, Jos Verstappen, Giorgio Pantano, Tonio Liuzzi, Nico Rosberg, Lewis Hamilton, Kimi Raikkonen, Robert Kubica, Sébastien Buemi, Nico Hulkenberg, Pastor Maldonado, Giedo Van der Garde and many more motor-racing champions.

The latest name on the list is the young, very fast Dutch driver Max Verstappen who has now reached the ranks of Formula 1.
CRG's commitment towards technical and quality product improvement is constant over time as confirmed by the drivers that year after year bring the company on top of the championships all around the world.

The passion is always the same... evolution keeps up!

3. Welcome to CRG

CRG would like to welcome you to our Family. As for many years it has been our policy to treat all of our customers like family and to supply a good quality product that meets the demands of any driver.

Inside this manual you will find some hints and tips about building your new CRG and how to maintain it to a high standard. Also enclosed are some basic set up instructions.

Welcome to CRG

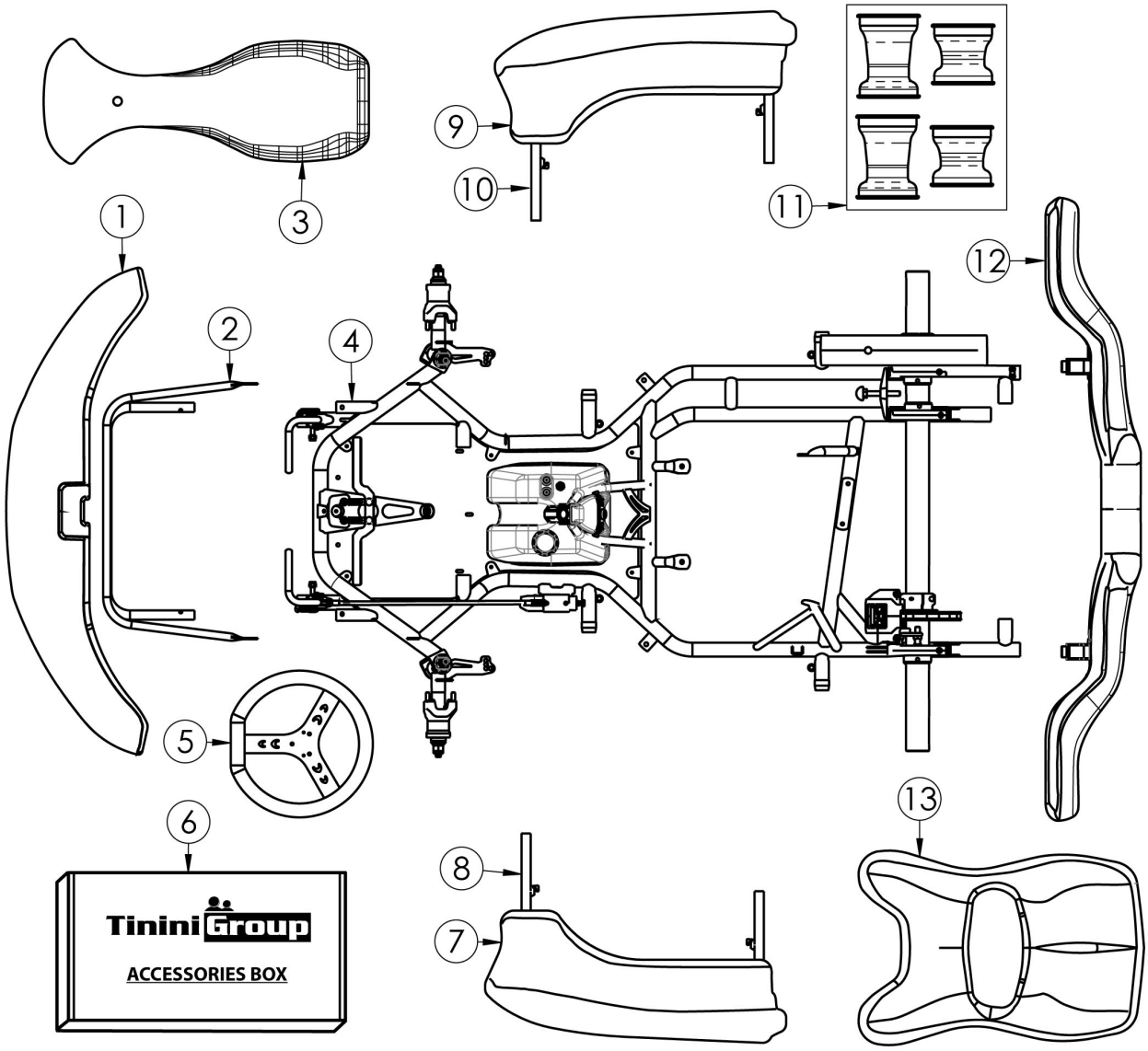
TECHNICAL INFO: infotecniche@kartcrg.com
GENERAL INFO: crg@kartcrg.com

CRG S.p.A
Via Mantova 4F, Lonato del Garda, 25017. Italy Tel. 030.9912604 Fax. 030.9130704 www.kartcrg.com

4. How your CRG arrives

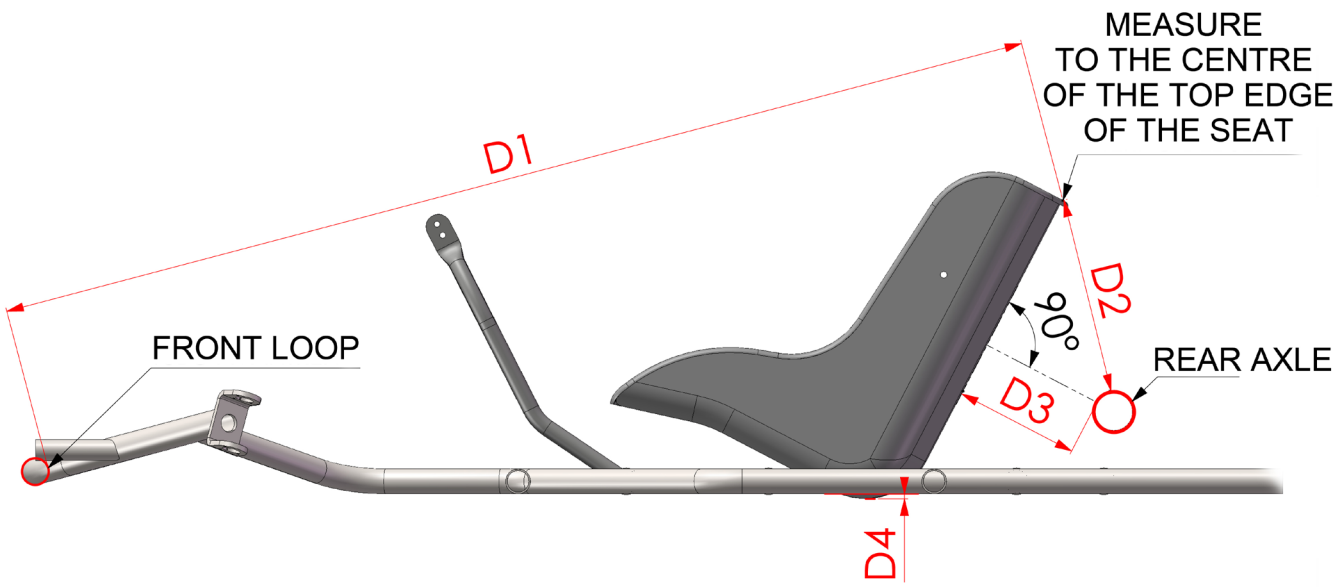
- **Accessories box**

5. Getting your CRG out the box



1. Front spoiler
2. Front nerf bars
3. Front nassau panel
4. Your new CRG kart
5. Steering wheel
6. Accessories box
7. Left hand plastic side pod
8. Left hand lateral nerf bar
9. Right hand plastic side pod
10. Left hand lateral nerf bar
11. CRG wheels
12. Rear bumper
13. CRG seat

6. Seat measurements



MEASUREMENT	MINI	JUNIOR	SENIOR	SHIFTER	DD2
D1	1095	1250	1275	1285	1285
D2	195	195	195	195	195
D3	145	140	130	120	125
D4	0	0	5	5	5

(All measurements in mm)

MEASUREMENT	MINI	JUNIOR	SENIOR	SHIFTER	DD2
D1	43 & 1/8	49 & ¼	50 & 3/16	50 & 9/16	50 & 9/16
D2	6 & 11/16	6 & 11/16	6 & 11/16	6 & 11/16	6 & 11/16
D3	5 & 3/4	5 & ½	5 & 1/8	4 & ¾	4 & 15/16
D4	0	0	3/16	3/16	3/16

(All measurements in inches)

7. Mounting the bodywork

7.1 Mounting the side fairings

1. Place the plastic side pod on the metal side bar.

2. Fix it in place with the screws supplied.

3. Insert the side bar into the supports on the chassis and attach with the fixing spring which is supplied.

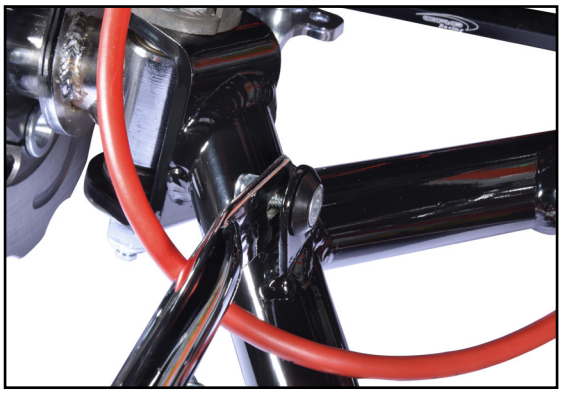
7. Mounting the bodywork

7.2 Mounting the front bumpers

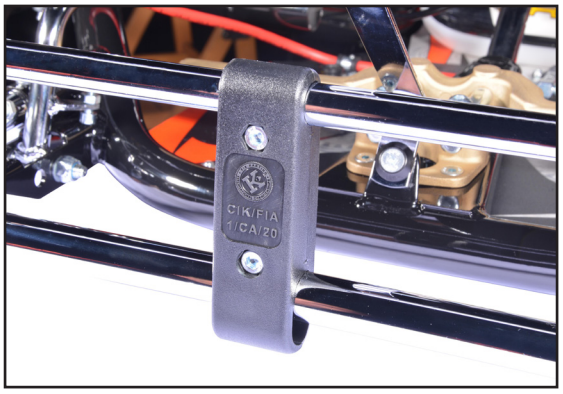
1. Insert two the M6 bolt's with their washers.

2. Tighten the bolt so it does not turn.

3. Attach the upper front bumper using the M6 counter sunk bolts and washers on the two points.



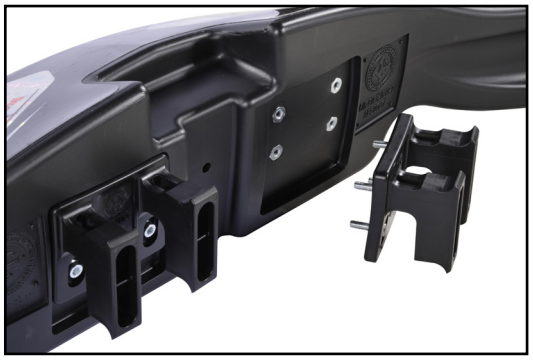
4. Using the two M6 bolts attach the two plastic halfs of the clamp together.



7. Mounting the bodywork

7.3 Mounting the front spoiler

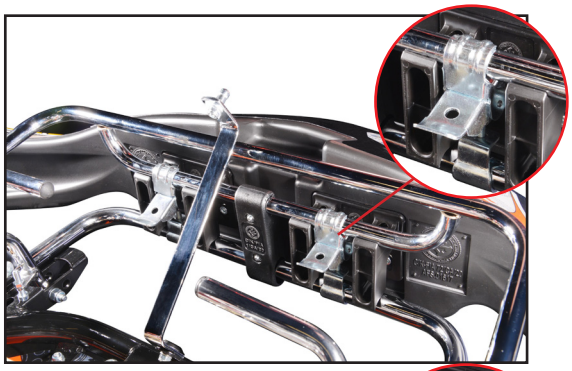
1. Attach the first fixing plate to the plastic spoiler using the four M6 bolts.



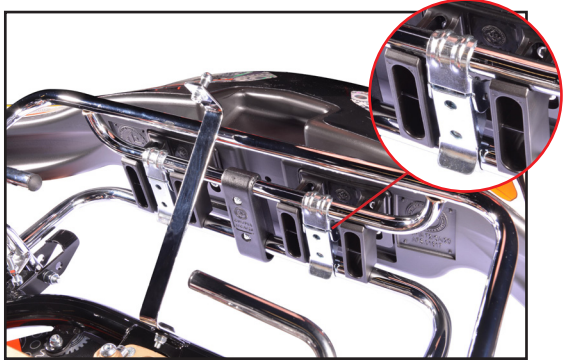
2. Attach the second fixing plate to the plastic spoiler using the remaining four M6 bolts.

3. Make sure the fixing plate is fixed on in the middle position.

4. Place the complete spoiler between the two metal bumpers with the bumper clamps open.



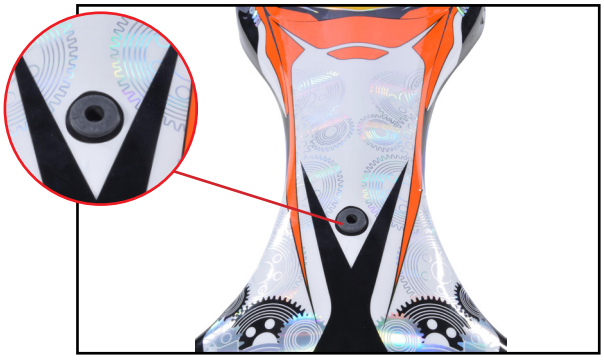
5. Close the bumper clamps and make sure the complete spoiler does not move.



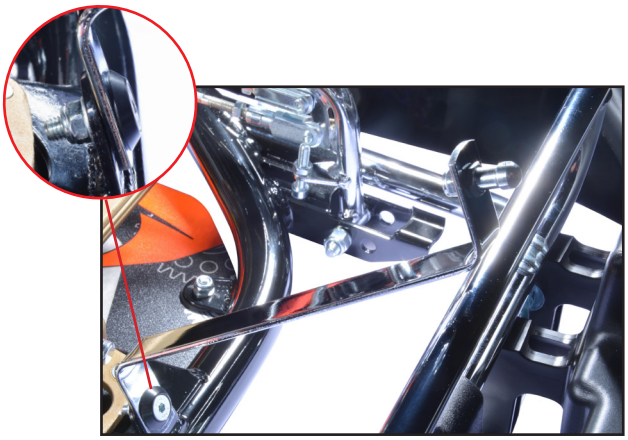
7. Mounting the bodywork

7.4 Mounting the front fairing

1. Push the three rubbers into the holes in the front fairing.

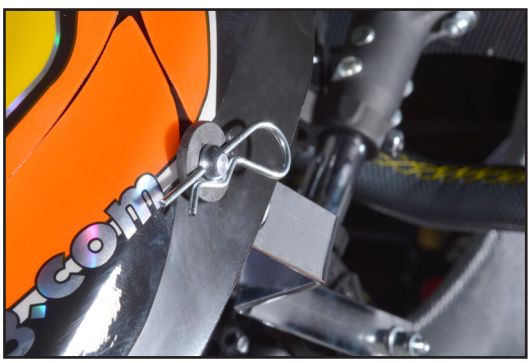


2. Attach the front fairing support brackets to the kart using the bolts supplied.



3. Attach the three front fairing pivot supports to the brackets.

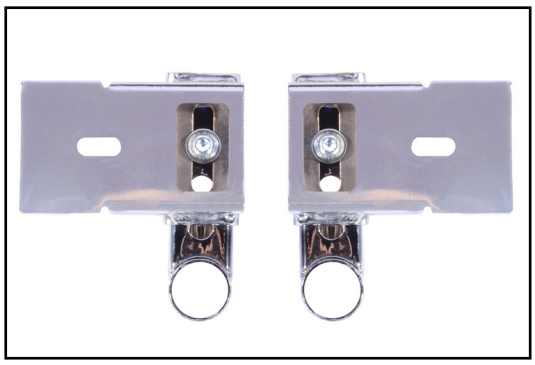
4. Lay the front fairing on the brackets and insert the fairing pivot supports into the rubbers and the put the fixing ‘R’ clips.



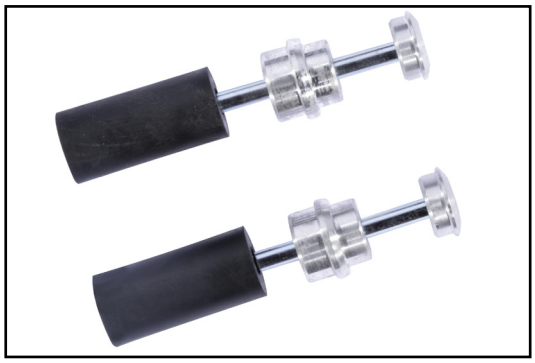
7. Mounting the bodywork

7.5 Mounting the rear bumper

1. Attach the flat plates onto the vertical supports using the M8 bolts supplied respecting the left and right direction which is shown in the picture.



2. Using the bumper rubber kit supplied for your specific kart mount the complete supports on the chassis.

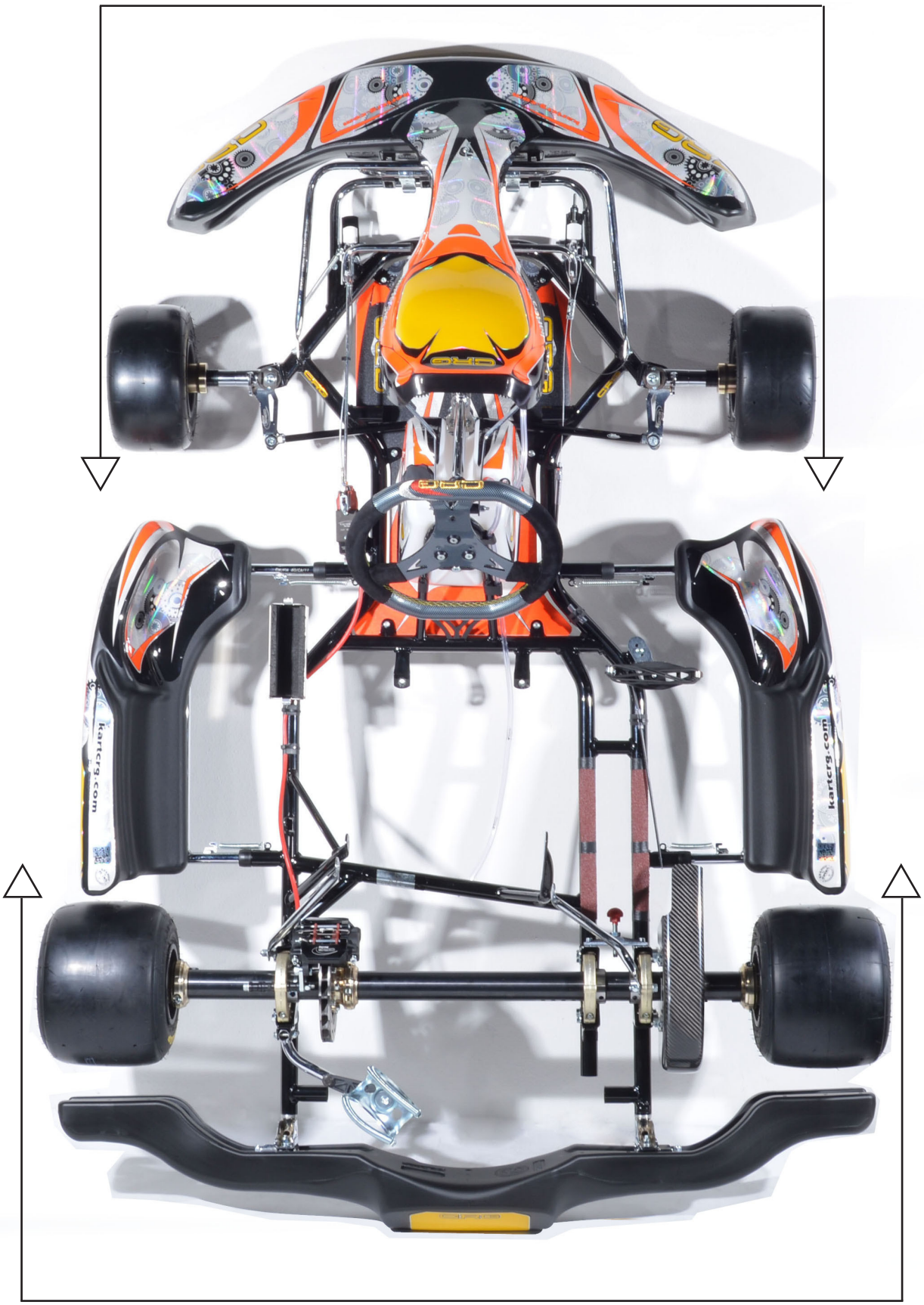


3. Attach the plastic rear bumper to the supports on the chassis using the M8 counter sunk bolts and washers supplied.

4. The rear bumper when mounted should look like the example displayed in the picture.

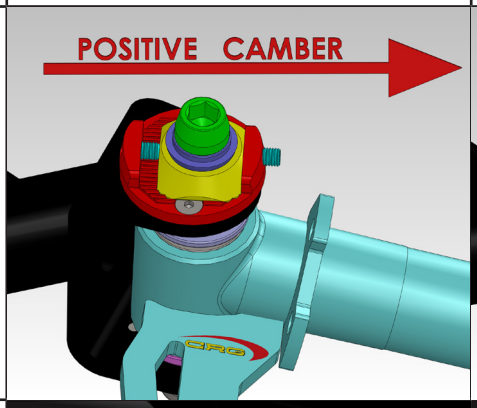
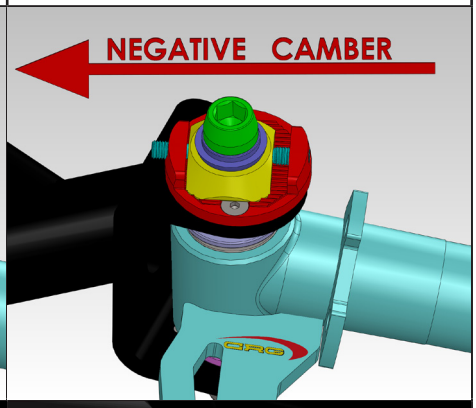
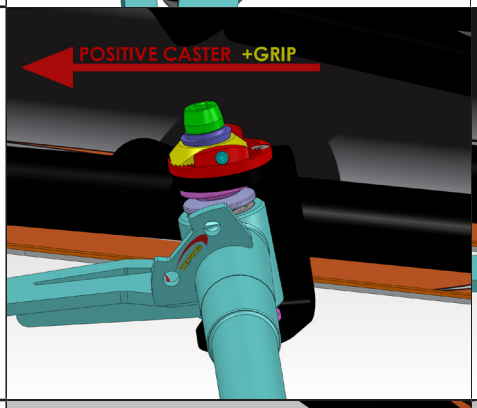
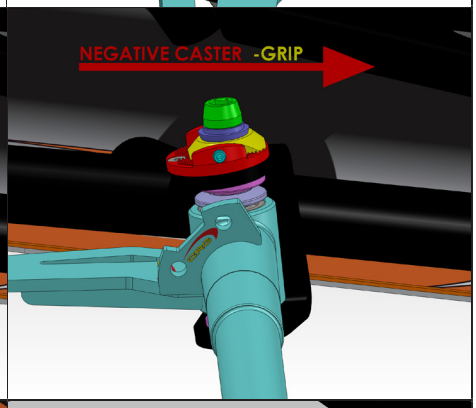
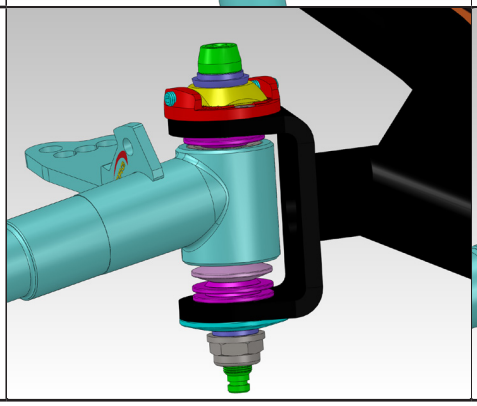
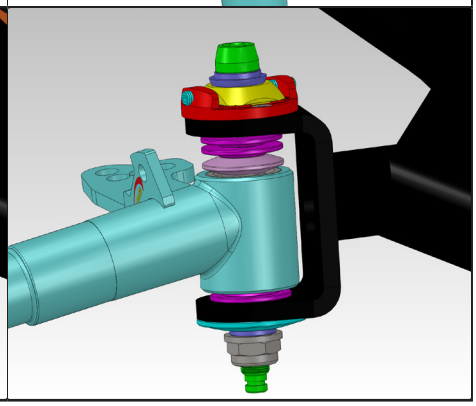
8. General set-up

FRONT WIDTH
1210mm



REAR WIDTH
1395mm

9. Front end adjustments

2mm negative camber per side. 4mm of negative camber total left and right in dry conditions. 0mm camber in wet conditions		
1 line of positive caster per side in dry conditions. 4 lines of positive caster per side in wet conditions.		
Use the kart in the low position and the stub axle in the high position in dry conditions. Use the kart in the high position and the stub axle in the low position in wet conditions.		

10. Rear axle hardness

Ø 40 REAR AXLE		
TYPE	HARDNESS	THICKNESS
MT	100-110	3mm
S	120-130	3mm
M	150-160	3mm
H	180-190	3mm
K	200-210	3mm

SOFT

HARD

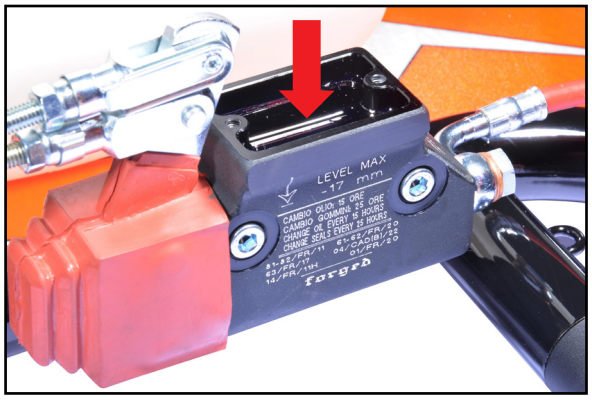
Ø 50 REAR AXLE		
TYPE	HARDNESS	THICKNESS
S20	60-70	2mm
S25	90	2,5mm
T3	90-100	2mm
T6	110	2mm
T1	120	2,5mm
T4	130	2,5mm
T7	140	2mm
M20 (STD)	160-170	2mm
M25	160-170	2,5mm
T2	200	2mm
T5	230-250	2mm

SOFT

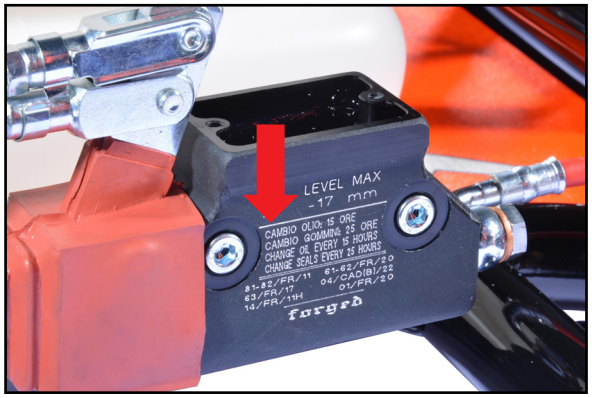
HARD

11. Bleeding the CRG brake system

1. Fill the master cylinder with the brake fluid as indicated by the red arrow.

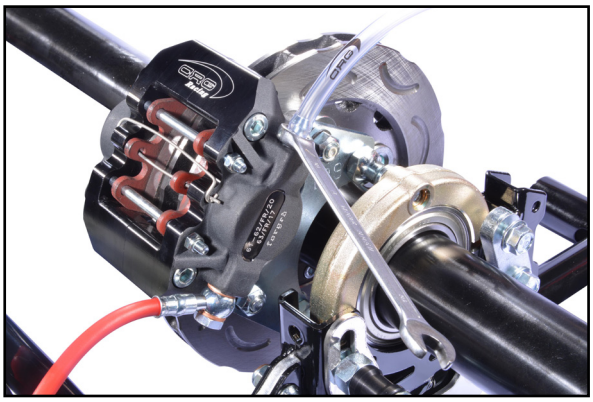


2. The brake fluid in the master cylinder should always be at the correct level indicated by the red arrow.



3. To bleed the brake:

- The pedal should be pushed down gently so the oil passes through the system.
- When the pedal is right down you should open the bleed valve on the caliper as shown in the picture and the air will come out of the tube attached to the bleed valve.
- When the pedal reaches the end of its course the bleed valve should be closed and the pedal returning to the normal position.
- Checking always the level of the brake fluid.
- Then repeating this procedure until the feeling in the pedal becomes very hard and the travel is at its shortest.



WARNING

- ***CRG recomends Xeramic DOT 4 brake fluid for this system.***
- ***The brake fluid should be changed every 15 hours.***
- ***The seals should be changed every 25 hours.***
- ***There should always be 3mm to 5mm of play on the pedal***

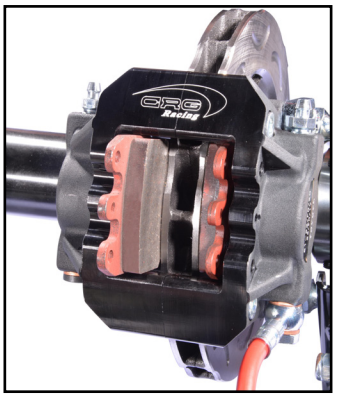
12. Changing the brake pads

1. Remove the safety clip from the center of the caliper.

2. Using a 4mm allen key and a 8mm spanner loosen the fixing bolts.

3. Take out the fixing bolts.

4. Pull out the brake pad and exchange with the new. After the brake pads are changed put the fixing bolts and safety clip back onto the caliper.



WARNING

- *CRG recomends not to let the brake pad wear go to low.There should always be a minimum of 5mm - 7 mm of ferodo on the pad.*
- *The fixing bolts should be tightened up fully the loosened of slightly so the bolts turn.*
- *It is important the correct type of brake pad is used with the correct type of brake disco*
- *Only original brake pads should be used with the CRG brake systems.*

13. Safety instructions

This guide is compiled by C.R.G. to provide the user with the procedures for the safety and maintenance of their Kart.

**Carefully read the instructions, notes and safety notices in this manual.
A failure to comply with safety regulations may result in serious consequences.
A Kart can be dangerous if not properly maintained or used improperly.**

General Instructions

- Use the Kart only on a track specified for Karting with a homologation or licence given by the respected governing bodies.
- Make sure that on the track there is not visible residues and traces of petrol or oil
  Avoid touching the engine, rotating parts and parts that are hot
- Be careful not to step on the throttle cable and fuel lines and brake pipes when getting in or getting out of the Kart
- Avoid contact with the side fairings getting in or out of the Kart
- Take care when re-fueling to prevent the spillage of fuel; a spillage of fuel can cause accidents or even fire hazards
- Check that the throttle cable is not too tight: as this could accelerate the Kart without the presence of the driver
- Pay attention when standing near the Kart while the Kart is being warmed up on the Kart stand
- In cleaning avoid using oily sprays near the brake disc and calipers
- Replace damaged rims; a damaged rim may lead to loss of pressure in the tire and may have serious consequences
- Never allow a Kart to go on track with broken or missing parts
- Never go on track with worn or damaged tires: the bursting of the rubber can lead to very serious consequences
- Cold tires have reduced traction and increase the possibility of losing control of the Kart on track
- Too much grip on track can lead to injury to the ribs of the driver

Kart

- The Karts should be kept in a original state
- Use only original spare parts from C.R.G.
- Maintain the Kart adequately and to a high standard
- Use a tire with adequate grip to the track surface (if needed, contact CRG)

Not using the Kart or original spare parts can result in serious consequences.

Drivers

- Inquire about safety issues that are prohibited and / or any restrictions imposed by the owners or organization of the track
- Make sure that you understand any restrictions about size and / or age if below the minimum requirements by the regulations of individual countries
- Know the meaning of the flag signals and follow the instructions of the staff of the track
- No long hair or clothing articles should come out of the helmet and thereby reach the rotating parts of the Kart which could be fatal
- Having health problems, especially a history of heart problems, problems related to the neck or back, nervous disorders can be dangerous while driving
- Being under the influence of drugs or alcohol is strictly prohibited
- It is not recommended to drive in very cold weather as it slows down the senses and reactions of the driver

Always observe the safety regulations: the dangerous behavior of a driver puts himself and others at high risk.

Clothing

- Wear a helmet, the correct size for the pilot's head, approved according to national or international regulations, with safety closure under the chin
- Do not use clips or straps to tie long hair under the helmet
- Wear appropriate closed shoes with short laces
- Use a race suit and gloves that complies with the national or international regulations
- Wear a rib protectors that is the correct size (recommended)
- Use neck protection in case of problems with the neck and head

It is the drivers responsability to make sure that they are wearing the correct accessories and garments of clothing while driving on track.

Summary of general checks before taking to the track

- The brake is an essential element of security.
- Do not start the Kart if the brake system is defective or if you have any doubts. A braking system that is defective or damaged brake hoses can result in serious consequences.
- Check the wear of the brake pads
- Check that there are no oil leaks in the brake system
- Check that the integrity of steering components: Assure all ball joints and bearings dont have eccessive play
- Check that both pedals are functioning correctly
- Check that the wheels are properly fixed and mounted onto the kart
- Check that the chain has the correct tension and is lubricated adequately
- Ensure that spoilers and fairings are properly fixed onto the kart
- Check tire wear is of a adequate standard
- It is advised to inflate the tires according to the recommended tire pressure of the tire manufacturer
- Steering wheels should be mounted onto the steering column with two bolts, if using only one electrical tape is recommended in case of breakages of the single bolt
- **CRG does not respond to any guarantee claims if the parts fitted are not original parts of CRG**

CRG

R2R
PROGRAM

e

DRENALINE

CRG S.p.A Via Mantova 4f/g Lonato del Garda 25017 Italy Tel. 030.9912604 Fax. 030.9130704 www.kartcrg.com chris.r2r@kartcrg.com